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EXAMINER	
Mr. Buck	
ART UNIT	PAPER NUMBER
2834	16

DATE MAILED:

EXAMINER INTERVIEW SUMMARY RECORD

All participants (applicant, applicant's representative, PTO personnel):

- (1) Mr. Dwyer (3) \_\_\_\_\_  
(2) Mr. Buck (4) \_\_\_\_\_

Date of interview

10-4-00

Type: ☐ Telephonic ☐ Personal (copy is given to ☐ applicant ☒ applicant's representative).

Exhibit shown or demonstration conducted: ☐ Yes ☒ No. If yes, brief description: \_\_\_\_\_

Agreement ☐ was reached with respect to some or all of the claims in question. ☒ was not reached.

Claims discussed: All

Identification of prior art discussed: All

Description of the general nature of what was agreed to if an agreement was reached, or any other comments: Discussed the

35 USC 112 problems, to clarify claim language.

(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.)

Unless the paragraphs below have been checked to indicate to the contrary, A FORMAL WRITTEN RESPONSE TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW (e.g., items 1-7 on the reverse side of this form). If a response to the last Office action has already been filed, then applicant is given one month from this interview date to provide a statement of the substance of the interview.

☒ It is not necessary for applicant to provide a separate record of the substance of the interview.

☐ Since the examiner's interview summary above (including any attachments) reflects a complete response to each of the objections, rejections and requirements that may be present in the last Office action, and since the claims are now allowable, this completed form is considered to fulfill the response requirements of the last Office action.

Mr. Buck

Examiner's Signature

1. (Three Times Amended) A piezoelectric resonator, comprising:

a piezoelectric resonator element having a piezoelectric body and an electrode formed on a surface of the piezoelectric body;

a supporting member supporting said piezoelectric resonator element; and

a plurality of leads mechanically connecting said piezoelectric resonator element to said supporting member and permitting electrical connection thereof, each of said leads being provided with a flat leading end portion which opens in a substantially U-shaped opening toward a leading end, connected substantially in parallel with said electrode, said electrode opposing one surface of said piezoelectric resonator element, and a connecting layer being formed with a conductive resin between the leading end portion and said electrode, and

said piezoelectric resonator element being attached to said leads [to] at an end of the substantially U-shaped opening of said leading end portion on a side of said leads facing said supporting member, so that an edge of said piezoelectric resonator element on the side facing said supporting member may be positioned at said end of the substantially U-shaped opening and that the piezoelectric resonator element is supported by said leads so that a gap is formed between said supporting member and said piezoelectric resonator element.

4. (Twice Amended) The piezoelectric resonator according to claim 1, further comprising a fixing layer made of a UV-setting type resin coated thereunto having a short setting time, [so as to fix] the fixing layer fixes the leading end portion of said leads and said piezoelectric resonator element prior to [forming] formation of said connecting layer,

said connecting layer being formed with a conductive resin at least injected into a gap between said leading end portion and said electrode.

6. (Twice Amended) The piezoelectric resonator according to claim 1, [prior to connecting said leading end portion and said electrode,] said connecting layer being formed with a conductive resin coated onto said leading end portion or said electrode.

8. (Three Times Amended) A method for manufacturing a piezoelectric resonator, comprising:  
attaching a piezoelectric resonator element comprising a piezoelectric body having an electrode formed thereon, to a plurality of leads which connect said piezoelectric resonator element mechanically to a supporting member and permit electrical connection thereof;  
providing a gap between said supporting member and said piezoelectric resonator element; and

forming a connecting layer of a conductive resin between said electrode and flat leading end portions of said leads, connected substantially in parallel with said electrode, opening in substantially a U shape toward a leading end thereof, said electrode opposing one surface of said piezoelectric resonator element,

said piezoelectric resonator element being attached to said leads [to] at an end of the substantially U-shaped opening of said leading end portion on a side of said leads facing said supporting member, so that an edge of said piezoelectric resonator element on the side facing said supporting member may be positioned at said end of the substantially U-shaped opening.

9. (Twice Amended) The method for manufacturing a piezoelectric resonator according to claim 8, forming said connecting layer comprising:

forming a fixing layer having a short setting time by coating a UV-setting type resin onto at least a part of the leading end portions of said leads and said piezoelectric resonator element;  
and

forming the connecting layer by injecting the conductive resin at least into the gap between said electrode and said leading end portions.

11. (Twice Amended) The method for manufacturing a piezoelectric resonator according to claim 8, further comprising, prior to connecting said leading end portions to said electrode, forming said connecting layer [being formed] with the conductive resin coated onto said leading end portions or said electrode.

14. (Three Times Amended) A piezoelectric resonator unit having a piezoelectric resonator, and a hollow protector, the piezoelectric resonator comprising:

a piezoelectric resonator element having a piezoelectric body and an electrode formed on a surface of the piezoelectric body;

a supporting member supporting said piezoelectric resonator element; and

a plurality of leads mechanically connecting said piezoelectric resonator element to said supporting member and permitting electrical connection thereof each of said leads being provided with a flat leading end portion which opens in a substantially U-shaped opening toward a leading end, connected substantially in parallel with said electrode, said electrode opposing one surface of said piezoelectric resonator element, and a connecting layer being formed with a conductive resin between the leading end portion and said electrode, and

said piezoelectric resonator element being supported by said leads so that a gap is formed between said supporting member and said piezoelectric resonator element,

said piezoelectric resonator being inserted, and sealed by said supporting member and said protector, and said piezoelectric resonator being attached to said leads [to] at an end of the substantially U-shaped opening of said leading end portion on a side of said leads facing said

supporting member, so that an edge of said piezoelectric resonator element on the side facing said supporting member may be positioned at said end of the substantially U-shaped opening.

17. (Twice Amended) The piezoelectric resonator unit according to claim 14, further comprising a fixing layer made of a UV-setting type resin coated thereunto having a short setting time, [so as to fix] the fixing layer fixing the leading end portion of said leads and said piezoelectric resonator element prior to [forming] formation of said connecting layer, and said connecting layer being formed with a conductive resin at least injected into a gap between said leading end portion and said electrode.

19. (Twice Amended) The piezoelectric resonator unit according to claim 14, [prior to connecting said leading end portion and said electrode,] said connecting layer being formed with a conductive resin coated onto said leading end portion or said electrode.